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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,056	06/23/2004	Jari Sirvio	AWEK 2881	9131
7812	7590	12/27/2005	EXAMINER	
SMITH-HILL AND BEDELL, P.C.			SOTELO, JESUS D	
16100 NW CORNELL ROAD, SUITE 220			ART UNIT	
BEAVERTON, OR 97006			PAPER NUMBER	
			3617	
DATE MAILED: 12/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,056

Applicant(s)

SIRVIO ET AL.

Examiner

Jesús D. Sotelo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 8-16 are in the application. Claims 1-7 have been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima (9-142391) in view of Heer et al (6,790,109).

Oshima discloses a ship including a main propulsion unit driving propeller 1 and teaches the use of steering propellers to provide the ship with steering in lieu of the conventional rudder. Oshima teaches that the use of a main propulsion unit provides the capability of generating a high output thrust, while the steering propellers reduce underwater noise.

The steering propellers of Oshima include a propeller part that is stationarily located outside the hull, as desired. Heer et al discloses a transport ship including a hull having a cargo deck at least in the aft region. Heer et al provides propulsion and steering through the use of steerable propellers 2 mounted on the aft area of the hull. In view of these disclosures, it would have been obvious to one skilled in the art to use the propulsion and steering system disclosed by Oshima on a cargo ship having an aft cargo space generally as taught by Heer et al. While Oshima discloses a particular application on a particular ship of his propulsion and steering arrangement, the disclosure is not limited to this application. As noted by Oshima, a main propulsion unit mounted in a conventional

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way, as in Oshima is capable of producing a higher propulsion output. The use of steerable units to propel a ship as in Heer et al involves the use of complex mounting means that permit the units to rotate for steering while providing sufficient support to transfer a forward propelling force to the ship. For these reasons the propulsion and steering arrangement would have been desirable on a cargo ship of the type disclosed by Heer et al. The number of main propulsion units is deemed to have been an obvious matter of design choice to one skilled in the art. The method steps of claim 16 are inclusive in the operation and steering means of Oshima as modified by Heer et al.

Response to Arguments

4. Applicant's arguments filed 10/31/05 have been fully considered but they are not persuasive. As noted in paragraph 3, above, the disclosure of Oshima is not limited to any particular vessel and as noted by applicant, the use of steering propellers as disclosed by Heer et al create problems that would be alleviated using a system as taught by Oshima. The main propulsion unit of Oshima produces a high output, which is desirable in a cargo ship, while the steering units provide a high degree of maneuverability, which is desirable in a cargo ship approaching a harbor.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesús D. Sotelo whose telephone number is 571-272-6686. The examiner can normally be reached on Mon. – Fri. 5:30 AM – 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jesús D. Sotelo
Jesús D. Sotelo '2/22/05
Primary Examiner
Art unit 3617
KNX 03D69 ☺

jds

December 22, 2005